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ward J. Milbrada

P&G Case 8369Q

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of

Sprengard-Eichel et al.

Confirmation No. 6846

Serial No.: 09/778,371

Group Art Unit 3761

Filed: February 7, 2001

Examiner M. Kidwell

For: Absorbent Article with Thermal Cell Actuator

**BRIEF ON APPEAL** 

Mail Stop Appeal Brief - Patents Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Enclosed, pursuant to 37 C.F.R. 1.192(a), is Appellant's brief on Appeal for the above application. The Brief is being forwarded in triplicate.

The fee for this Brief on Appeal is \$320.00 per 37 CFR 1.17(c).

The Director is hereby authorized to charge the above fee, or any additional fees that may be required, or credit any overpayment to Deposit Account No. 16-2480 in the name of The Procter & Gamble Company. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Edward J. Milbrada

Agent for Appellant(s) Registration No. 40,090

(513) 626-1167

Date: May 19, 2004

Customer No. 27752

(BriefonAppealTrans.doc) (Last Revised 3/30/2004)

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Examiner: M. Kidwell

For: ABSORBENT ARTICLE WITH THERMAL CELL ACTUATOR

# **APPELLANT'S BRIEF**

Mail Stop Appeal Brief - Patents Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450 Dear Sir,

This is an appeal from the final rejection of pending Claims 1, 3-5, 7, 9, 10 and 12-18 which was made in an Office Action (Paper No. 18) dated December 23, 2003. A timely Notice of Appeal was filed on March 23, 2004. The Appellants' brief is submitted in triplicate.

## **REAL PARTY IN INTEREST**

The Appellant named in the caption of this appeal brief has assigned the entire interest in this application to The Procter & Gamble Company of Cincinnati, Ohio.

## RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences known to the Appellant, or known to Appellants' legal representative, that will directly affect the Board's decision in the present appeal.

## STATUS OF CLAIMS

Claims 1-7 and 9-20 are pending. Claim 2 is allowed. Claims 1, 3-5, 7, 9, 10 and 12-18 stand rejected. Claims 6, 19 and 20 are objected to. The rejection of Claims 4, 5, 7 and 12-18 is being appealed. A listing of pending Claims 1-7 and 9-20 appears in attached Appendix 1.

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## STATUS OF AMENDMENTS

An amendment under 37 CFR § 1.116 (Paper No. 19) canceling Claims 1, 3, 9 and 10 and amending the remaining dependent claims to depend from Claim 2 was submitted on February 23, 2004 (Paper No. 19). A copy of Claims 2, 4-7 and 11-20 as amended under 37 CFR § 1.116 on February 23, 2004 appears in attached Appendix 2.

# **SUMMARY OF INVENTION**

The Appellant's claimed invention (see Claim 2) relates to an absorbent article with a thermal call actuator which adds or removes heat from at least a portion of the absorbent article upon actuation resulting in a useful function (page 8, line 20–page 22, line 28). In particular the thermal cell actuator does at least one of the following:

- a) maintains the absorbent article at a predefined temperature (page 9, lines 20-23),
- b) maintains relative humidity in a volume between a wearer and the absorbent article when the article is worn (page 20, lines 13–16),
- c) melts a material disposed on the absorbent article (page 18, lines 26–29 and page 22, lines 26–28),
- d) changes a mechanical property of a different component of the absorbent article (page 19, lines 22–29 and page 20, lines 25–28),
- e) changes the breathability of a component of the absorbent article (page 21, lines 22–30), and
- f) changes the vapor pressure of a material disposed on the absorbent article (page 22, lines 10–12).

The absorbent article also includes a triggering mechanism connected with the thermal cell actuator whereby a non-urine based signal within the article causes the thermal cell actuator to add or remove heat from at least a portion of the absorbent article (page 17, lines 10–28). The claimed absorbent article also includes: a backsheet (page 5, line 21 - page 6, line 19), a liquid pervious topsheet joined to the backsheet (page 6, lines 20-27), and an absorbent core positioned between the topsheet and the backsheet (page 5, lines 9 and 10, page 6, line 28–page 7, line 5).

## **ISSUE**

Whether it is proper to refuse to enter an amendment made after a final Office Action under 37 CFR § 1.116 which cancels a rejected independent claim and amends dependencies to an allowed independent claim.

## **GROUPING OF CLAIMS**

The ground of rejection of Claims 4, 7, 12, 13, 15–18 is equally applicable with respect to the rejection over Pyrozyk, et al (US 5,431,622).

The ground of rejection of Claims 4, 7, 13, and 14 is equally applicable with respect to the rejection over the Glaug, et al. reference (US 5,797,892).

No ground of rejection was stated in the final Office Action for Claim 5.

## **ARGUMENT**

The Examiner improperly declined to enter an amendment under 37 CFR § 1.116 that canceled a claim rejected in the preceding Office Action.

In the present application, the Appellants filed an amendment under 37 CFR § 1.116 (Paper No. 19) in response to a final Office Action (Paper No. 18). This amendment canceled rejected Claims 1, 3, 9 and 10 and amended the remaining dependent claims (Claims 4–7 and 11–20) to depend, either directly or indirectly, from Claim 2 which had been allowed by the final Office Action. Of these dependent claims, Claims 3-5, 7 and 12-18 stand rejected by the Final Office Action and Claims 6, 11, 19 and 20 stand objected to as depending from a rejected independent claim. In an Advisory Action dated March 8, 2004 (Paper No. 20) the Examiner declined to enter the Appellants' amendment and maintained the rejection of Claims 3–5, 7, 9, 10 and 12–18. The Advisory Action further stated that the Appellants' amendment would require further consideration and/or search, specifically asserting that the changes in claim dependency, in conjunction with the previously claimed limitation, will require at least consideration.

The Appellants submit that the Examiner improperly declined to enter their amendment under 37 CFR 1.116 for at least the following reasons:

• The Appellants' amendment did not result in changes that would require further search and/or consideration. Section 1.116 (b) of Part 37 of the Code of Federal Regulations expressly provides for canceling claims in an amendment filed after a final Office Action. As noted above, the Appellants', in Paper No. 19, cancelled a rejected independent claim and, of necessity, amended the remaining dependent claims to depend from the remaining allowed independent claim. It is well settled that dependent claims have all of the limitations of the base claim. Thus Claims 4, 5, 7 and 12-18 are novel and unobvious over the art of record and are allowable. Regarding the change of

dependency, the Appellants point out that the change was a formal matter necessitated by the cancellation of Claim 1 and, as such, is permissible under 37 CFR § 1.116(b). Therefore, the Applicants submit that the refusal to enter their amendment under 37 CFR § 1.116(b) was improper and that Claims 4, 5, and 12-18 should be allowed.

• With respect to Claims 6, 19 and 20 which were objected to the Appellants also submit that the refusal to enter their amendment under 37 CFR § 1.116 was improper. Specifically, the Appellants submit that the amendment responded to a formal matter, correcting the dependency of Claims 6, 19 and 20 so that they depend from an allowed claim. Therefore, the amendment or these was proper under 37 CFR § 1.116(b) and should be entered.

## **SUMMARY**

The refusal to enter the Appellants' amendment under 37 CFR § 1.116 was improper as was the maintenance of the rejection of Claims 4, 5, 7 and 12-18 given in the Final Office Action. In light of the analysis and discussion provided above, Appellants respectfully request the Honorable Board of Patent Appeals and Interferences to require entry of the Appellants' amendment under 37 CFR § 1.116 and to remand the application with instructions that Claims 2, 4–7 and 11–20 be allowed over the cited art.

Respectfully submitted,

Edward J. Milbrada

Agent for Appellants

Registration No. 40,090

Tele. No. (513) 626-1167

Date: May 19, 2004 Customer No. 27752

## APPENDIX 1 - Listing of Pending Claims

- 1. An absorbent article comprising:
  - (1) a backsheet;
  - (2) a liquid pervious topsheet joined to the backsheet;
  - (3) an absorbent core disposed intermediate to the topsheet and the backsheet; and
  - (4) a thermal cell actuator which adds or removes heat from at least a portion of the absorbent article upon actuation so as to result in a useful function selected from the group consisting of:
    - a) maintaining the article at a predefined temperature,
    - b) maintaining relative humidity in a volume between a wearer and the article when the article is worn
    - c) melting a material disposed on the article,
    - d) changing a mechanical property of a different component of the article,
    - e) changing the breathability of a component of the article, and
    - f) changing the vapor pressure of a material disposed on the article.
- 2. An absorbent article comprising:
  - (1) a backsheet;
  - (2) a liquid pervious topsheet joined to the backsheet;
  - (3) an absorbent core disposed intermediate to the topsheet and the backsheet;
  - (4) a thermal cell actuator which adds or removes heat from at least a portion of the absorbent article upon actuation so as to result in a useful function selected from the group consisting of:
    - a) maintaining the article at a predefined temperature,
    - b) maintaining relative humidity in a volume between a wearer and the article when the article is worn
    - c) melting a material disposed on the article,
    - d) changing a mechanical property of a different component of the article,
    - e) changing the breathability of a component of the article, and
    - f) changing the vapor pressure of a material disposed on the article; and
  - (5) a triggering mechanism connected with the thermal cell actuator whereby a nonurine based signal within the article causes the thermal cell actuator to add or remove heat from at least a portion of the absorbent article.

- 3. An absorbent article comprising:
  - (1) a backsheet;
  - (2) a liquid pervious topsheet joined to the backsheet;
  - (3) an absorbent core disposed intermediate to the topsheet and the backsheet; and
  - (4) an electrically powered thermal cell actuator which adds or removes heat from at least a portion of the absorbent article upon actuation so as to result in a useful function selected from the group consisting of:
    - a) maintaining the article at a predefined temperature,
    - b) maintaining relative humidity in a volume between a wearer and the article when the article is worn
    - c) melting a material disposed on the article,
    - d) changing a mechanical property of a different component of the article,
    - e) changing the breathability of a component of the article, and
    - f) changing the vapor pressure of a material disposed on the article.
- 4. The absorbent article of claim 1 wherein the thermal cell actuator performs the function at <u>a</u> location between the backsheet of the article and the skin of the wearer in response to a change in relative humidity, moisture, or temperature.
- 5. The absorbent article of claim 1 wherein the thermal cell actuator performs the function in response to the application of a tensile force by a caregiver to extend a portion of the article, or in response to the application of a normal force to compress a portion of the article by a caregiver.
- 6. The absorbent article of claim 1 wherein the action of the caregiver is an application of a tensile force to peel a tab exposing an opening in the thermal cell actuator which allows for the activation of said actuator.
- 7. The absorbent article of claim 1 wherein the thermal cell actuator controls humidity or temperature in the article.
- 8. Canceled
- 9. The absorbent article of claim 1 wherein the thermal cell actuator includes a material that performs an exothermic or endothermic reaction.
- 10. The absorbent article of claim 9 wherein the thermal cell actuator performs an endothermic reaction using a reactant selected from the group: Na<sub>2</sub>HPO<sub>4</sub>\*12H<sub>2</sub>O,

- Na<sub>2</sub>SO<sub>4</sub>\*10H<sub>2</sub>O, Na<sub>2</sub>CO<sub>3</sub>\*10H<sub>2</sub>O, NH4NO3, KCl, NH4Cl, KNO3, NaNO3, KCNS, NH4CNS, Urea, NaCH3COO\*3H2O.
- 11. The absorbent article of claim 1 wherein the thermal cell actuator includes a Peltier cell.
- 12. The absorbent article of claim 1 comprising a thermal cell actuator that provides a constant temperature in a region of the article during use of the article of about 15° to about 25° Celsius.
- 13. The absorbent article of claim 12 wherein the thermal cell actuator is not in contact with the wearer's skin when the article is worn.
- 14. The absorbent article of claim 12 wherein the thermal cell actuator is in vapor communication with the wearer's skin such that vapor can condensate inside the article.
- 15. The absorbent article of claim 12 wherein the thermal cell actuator is triggered by a user during application of the article.
- 16. The absorbent article of claim 12 wherein the constant temperature in the region is maintained for at least 1 hour.
- 17. The absorbent article of claim 1 wherein the thermal cell actuator changes a mechanical property of a different component of the article.
- 18. The absorbent article of claim 17 wherein the component of the article is a waist opening or a cuff opening.
- 19. The absorbent article of claim 1 wherein activation of the thermal cell actuator results in a change in the vapor pressure of a material disposed on the article.
- 20. The absorbent article of claim 19 wherein the thermal cell actuator provides at least a portion of the article with a temperature of less than about 25° Celsius.

# APPENDIX 2 - Claims After Amendment Under 37 CFR § 1.116

#### 1. Canceled

- 2. An absorbent article comprising:
  - (1) a backsheet;
  - (2) a liquid pervious topsheet joined to the backsheet;
  - (3) an absorbent core disposed intermediate to the topsheet and the backsheet;
  - (4) a thermal cell actuator which adds or removes heat from at least a portion of the absorbent article upon actuation so as to result in a useful function selected from the group consisting of:
    - a) maintaining the article at a predefined temperature,
    - b) maintaining relative humidity in a volume between a wearer and the article when the article is worn
    - c) melting a material disposed on the article,
    - d) changing a mechanical property of a different component of the article,
    - e) changing the breathability of a component of the article, and
    - f) changing the vapor pressure of a material disposed on the article; and
  - (5) a triggering mechanism connected with the thermal cell actuator whereby a non-urine based signal within the article causes the thermal cell actuator to add or remove heat from at least a portion of the absorbent article.

### 3. Canceled

- 4. The absorbent article of claim 1 2 wherein the thermal cell actuator performs the function at a location between the backsheet of the article and the skin of the wearer in response to a change in relative humidity, moisture, or temperature.
- 5. The absorbent article of claim ½ wherein the thermal cell actuator performs the function in response to the application of a tensile force by a caregiver to extend a portion of the article, or in response to the application of a normal force to compress a portion of the article by a caregiver.
- 6. The absorbent article of claim 4 2 wherein the action of the caregiver is an application of a tensile force to peel a tab exposing an opening in the thermal cell actuator which allows for the activation of said actuator.

7. The absorbent article of claim  $\pm 2$  wherein the thermal cell actuator controls humidity or temperature in the article.

### Claims 8-10 canceled

- 11. The absorbent article of claim  $\frac{1}{2}$  wherein the thermal cell actuator includes a Peltier cell.
- 12. The absorbent article of claim  $\pm 2$  comprising a thermal cell actuator that provides a constant temperature in a region of the article during use of the article of about 15° to about 25° Celsius.
- 13. The absorbent article of claim 12 wherein the thermal cell actuator is not in contact with the wearer's skin when the article is worn.
- 14. The absorbent article of claim 12 wherein the thermal cell actuator is in vapor communication with the wearer's skin such that vapor can eondensate condense inside the article.
- 15. The absorbent article of claim 12 wherein the thermal cell actuator is triggered by a user during application of the article.
- 16. The absorbent article of claim 12 wherein the constant temperature in the region is maintained for at least 1 hour.
- 17. The absorbent article of claim 4 2 wherein the thermal cell actuator changes a mechanical property of a different component of the article.
- 18. The absorbent article of claim 17 wherein the component of the article is a waist opening or a cuff opening.
- 19. The absorbent article of claim  $\frac{1}{2}$  wherein activation of the thermal cell actuator results in a change in the vapor pressure of a material disposed on the article.
- 20. The absorbent article of claim 19 wherein the thermal cell actuator provides at least a portion of the article with a temperature of less than about 25° Celsius.